No. 9600215

THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

W-L Research, Inc.

Whereas, THERE HAS BEEN PRESENTED TO THE

Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED DISTINCT VARIETY OF SEXUALLY REPRODUCED, OR TUBER PROPAGATED, PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF TWENTY YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR IMPORTING IT, OR EXPORTING IT, OR CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE ABOVE PURPOSES, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT. (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

ALFALFA

'WL 326 GZ'

In Testimony Whereof, I have hereunto set my hand and caused the seal of the Plant Variety Protection Office to be affixed at the City of Washington, D.C. this thirtieth day of July in the year of our Lord one thousand nine hundred and ninety-nine.

Attest:

Commissioner
Plant Variety Protection Office
Agricultural Marketing Service

Secretary of Agriculture

REPRODUCE LOCALLY. *Include form number and date on all reproductions.* FORM APPROVED - OMB NO. 0581-00

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
SCIENCE DIVISION - PLANT VARIETY PROTECTION OFFICE

APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE

(Instructions and information collection burden statement on reverse)

The following statements are made in accordance with the Privacy Act 1974 (5 U.S.C. 552a).

Application is required in order to determine if a plant variety protectio certificate is to be issued (7 U.S.C. 2421). Information is held confidenti until certificate is issued (7 U.S.C. 2426).

1. NAME OF APPLICANT(S) *(as it is to appear on the Certificate)*
W-L Research, Inc.

2. TEMPORARY DESIGNATION OR EXPERIMENTAL NUMBER
WS206

3. VARIETY NAME
WL 326 GZ

4. ADDRESS *(Street and No., or R.F.D. No., City, State, and ZIP Code, and Country)*
8701 W. US Hwy. 14
Evansville, WI 53536-8752
USA

5. TELEPHONE *(include area code)*
(608) 882-4100

6. FAX *(include area code)*
(608) 882-5800

FOR OFFICIAL USE ONLY

PVPO NUMBER 9600215

FILING DATE 4-2-96

FEES RECEIVED
FILING AND EXAMINATION FEE: $ 2450.00
DATE APR. 2, 1996
CERTIFICATION FEE: $ 300.00
DATE 5/4/1999

7. GENUS AND SPECIES NAME
Medicago sativa L.

8. FAMILY NAME *(Botanical)*
Leguminosae

9. CROP KIND NAME *(Common name)*
Alfalfa

10. IF THE APPLICANT NAMED IS NOT A "PERSON", GIVE FORM OF ORGANIZATION *(corporation, partnership, association, etc.) (Common name)*
Corporation

11. IF INCORPORATED, GIVE STATE OF INCORPORATION
California

12. DATE OF INCORPORATION
June 30, 1988

13. NAME AND ADDRESS OF APPLICANT REPRESENTATIVE(S), IF ANY, TO SERVE IN THIS APPLICATION AND RECEIVE ALL PAPERS
M. A. Peterson, Director of Research
W-L Research, Inc.
8701 W. US Hwy. 14
Evansville, WI 53536-8752

14. TELEPHONE *(include area code)*
(608) 882-4100

15. FAX *(include area code)*
(608) 882-5800

16. CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMITTED *(Follow instructions on reverse)*

a. ☒ Exhibit A. Origin and Breeding History of the Variety
b. ☒ Exhibit B. Statement of Distinctness
c. ☒ Exhibit C. Objective Description of the Variety
d. ☒ Exhibit D. Additional Description of the Variety
e. ☒ Exhibit E. Statement of the Basis of the Applicant's Ownership
f. ☒ Voucher Sample *(2,600 viable untreated seeds or, for tuber propagated varieties verification that tissue culture will be deposited and maintained in a public repository)*
g. ☒ Filing and Examination Fee ($2,450), made payable to "Treasurer of the United States" *(Mail to PVPO)*

17. DOES THE APPLICANT SPECIFY THAT SEED OF THIS VARIETY BE SOLD BY VARIETY NAME ONLY, AS A CLASS OF CERTIFIED SEED? *(See Section 83(a) of the Plant Variety Protection Act)?*
☐ YES *(If "yes," answer items 18 and 19 below)* ☒ NO *(If "no," go to item 20)*

18. DOES THE APPLICANT SPECIFY THAT SEED OF THIS VARIETY BE LIMITED AS TO NUMBER OF GENERATIONS?
☐ YES ☐ NO

19. IF "YES" TO ITEM 18, WHICH CLASSES OF PRODUCTION BEYOND BREEDER SEED?
☐ FOUNDATION ☐ REGISTERED ☐ CERTIFIED

20. HAS THE VARIETY OR A HYBRID PRODUCED FROM THE VARIETY BEEN RELEASED, USED, OFFERED FOR SALE, OR MARKETED IN THE U.S. OR OTHER COUNTRIES?
☐ YES *(If "yes," give names of countries and dates)* ☒ NO

21. The applicant(s) declare that a viable sample of basic seed of the variety will be furnished with application and will be replenished upon request in accordance with such regulations as may be applicable, or for a tuber propagated variety a tissue culture will be deposited in a public repository and maintained for the duration of the certificate.

The undersigned applicant(s) is(are) the owner(s) of this sexually reproduced or tuber propagated plant variety, and believe(s) that the variety is new, distinct, uniform, and stable as required in Section 41, and is entitled to protection under the provisions of Section 42 of the Plant Variety Protection Act.

Applicant(s) is(are) informed that false representation herein can jeopardize protection and result in penalties.

SIGNATURE OF APPLICANT *(Owner(s))*
Michael Peterson

NAME *(Please print or type)*
Michael A. Peterson

CAPACITY OR TITLE
Vice-President, Director of Research

DATE
3/28/96

SIGNATURE OF APPLICANT *(Owner(s))*

NAME *(Please print or type)*

CAPACITY OR TITLE

DATE

SD 470

Exhibit A

Origin and Breeding History of WL 326 GZ

WL 326 GZ is a 100-plant synthetic variety resulting from phenotypic recurrent selection for grazing tolerance (persistence) and disease-free roots from a grazing trial near Eatonton, GA. Source material traces to an elite experimental line developed through selection for resistance to Aphanomyces root rot (Race 1). Parental germplasm traces to GH755 (50%), Arrow (10%), Trident (10%), Vertus (10%), Vernal (10%), and Ranger (10%). The 100 parental selections were intercrossed under isolation in the greenhouse at Evansville, WI. Breeder (Syn 1) seed was bulked (all seed from all plants) following harvest in 1994.

Approximate germplasm source contributions are: M. falcata - 11%; Ladak - 16%; M. varia - 24%; Turkistan - 4%; Flemish - 40%; and Chilean - 5%.

Type and Frequency of Variants

No variants are recognized in WL 326 GZ beyond the limits given in Exhibit C.

Evidence of Uniformity and Stability

We have observed stability and uniformity in essential and distinguishing characteristics (e.g. disease resistance, fall dormancy, flower color) between the Syn 1 and Syn 2 generations of seed increase. WL 326 GZ is as uniform as other alfalfa varieties previously accepted by State seed certification programs.

Exhibit B

Statement of Distinctness for WL 326 GZ

WL 326 GZ is a semi-dormant (Group 3) and winterhardy variety that possesses superior pest (disease, insect, nematode) resistance, higher hay yield potential, and greater grazing tolerance when compared to other alfalfa varieties with similar adaptation.

WL 326 GZ is most similar to Cut N'Graze, without qualification. Looking at overall plant color, regrowth after cutting, fall dormancy, winterhardiness, grazing tolerance, and insect and nematode resistances suggest that WL 326 GZ and Cut N'Graze are very similar. However, there are significant differences in disease resistance and flower color between these two varieties that indicate that WL 326 GZ and Cut N'Graze are different. WL 326 GZ is highly resistant to anthracnose (Race 1); Cut N'Graze is moderately resistant (Table 1). WL 326 GZ is highly resistant to Verticillium wilt; Cut N'Graze displays low resistance to this disease (Table 2). WL 326 GZ is highly resistant to Aphanomyces root rot (Race 1); Cut N'Graze displays low resistance to this disease (Table 3). Finally, WL 326 GZ displays 99% purple and 1% variegated flowers, whereas Cut N'Graze expresses only 88% purple and 12% variegated flowers (Table 7).

There are four additional varieties which are similar to WL 326 GZ: MagnaGraze, WL 317, Magnum IV, and DK 133. However, distinct and significant differences exist between WL 326 GZ and each of these four varieties.

WL 326 GZ is similar to MagnaGraze. However, WL 326 GZ is highly resistant to anthracnose (Race 1); MagnaGraze is resistant to this disease (Table 1). WL 326 GZ is highly resistant to Aphanomyces root rot (Race 1); MagnaGraze is only moderately resistant to this disease (Table 3). WL 326 GZ is resistant to the pea aphid; MagnaGraze displays only low resistance to this important insect pest (Table 5). Finally, WL 326 GZ displays 99% purple and 1% variegated flower color, whereas MagnaGraze displays 88% purple and 12% variegated flower color (Table 7).

WL 326 GZ is also similar to WL 317. However, WL 326 GZ is highly resistant to anthracnose (Race 1); WL 317 is resistant to this disease (Table 1). WL 326 GZ is highly resistant to Aphanomyces root rot (Race 1); WL 317 displays low resistance to this disease (Table 3). Finally, WL 326 GZ is resistant to the blue alfalfa aphid; WL 317 displays low resistance to this important insect pest (Table 6).

WL 326 GZ is also similar to Magnum IV. However, WL 326 GZ is highly resistant to Aphanomyces root rot (Race 1); Magnum IV displays moderate resistance to this disease (Table 3). WL 326 GZ is a Group 3 fall dormant variety; Magnum IV is a Group 4 semi-dormant variety (Table 4). WL 326 GZ is resistant to the pea aphid; Magnum IV displays low resistance to this important insect pest (Table 5). Finally, WL 326 GZ displays predominately purple flower color (99% purple, 1% variegated), whereas Magnum IV displays 92% purple and 8% variegated flower color (Table 7).

Exhibit B (continued)

WL 326 GZ is also similar to DK 133. However, WL 326 GZ is highly resistant to Aphanomyces root rot (Race 1); DK 133 is resistant to this disease (Table 3). In addition, WL 326 GZ is a fall dormant Group 3 alfalfa, whereas DK 133 is a semi-dormant Group 4 variety (Table 4). WL 326 GZ is also resistant to the blue alfalfa aphid; DK 133 only displays low resistance to this insect pest (Table 6). Finally, WL 326 GZ displays predominately purple flower color (99% purple, 1% variegated)), whereas DK 133 displays significant variegated flower color (90% purple, 10% variegated) (Table 7).

WL 326 GZ
Exhibit B

Table 1 > Anthracnose (Race 1) Resistance* - Evansville, WI (1996)

Entry	% Resistance
Arc (HR)	65
WL 326 GZ (HR)	60
WL 317 (R)	43
MagnaGraze (R)	35
Cut N'Graze (MR)	21
Saranac (S)	0
Mean	37
LSD (.05)	11
CV %	15

*Data was obtained from a 4-replicate greenhouse flat test with approximately 50 seedlings/entry/replicate.

WL 326 GZ
Exhibit B

Table 2 > Verticillium Wilt Resistance* - Evansville, WI (1996)

Entry	% Resistance	A.S.I.
Oneida VR (HR)	60	2.3
WL 326 GZ (HR)	55	2.5
Cut N'Graze (LR)	11	3.9
Saranac (S)	2	4.4
Mean	32	3.3
LSD (.05)	14	0.4
CV %	19.4	9.1

*Data obtained from a 3-replicate growth room cone test with approximately 75 plants/entry/replicate.

Table 3 > Aphanomyces Root Rot (Race 1) Resistance* - Evansville, WI (1996)

Entry	% Resistance	A.S.I.
WL 326 GZ	55	2.4
WAPH-1 (HR)	50	2.6
DK 133 (R)	41	2.9
MagnaGraze (MR)	26	3.3
Magnum IV (MR)	19	3.5
Cut N'Graze (LR)	11	3.8
WL 317 (LR)	9	4.0
Agate (S)	0	4.7
Mean	26	3.4
LSD (.05)	9	0.3
CV %	16.2	8.2

*Date obtained from a 4-replicate greenhouse tub test with approximately 60 seedlings/entry/replicate.

Table 4 > Fall Dormancy Reaction* - Evansville, WI (1995)

Clipped 9/11/95 Scored 10/25/95

Entry (Dormancy Group)	Fall Height (Inches)
Vernal (2)	3.4
Pioneer 5246 (3)	5.0
WL 326 GZ (3)	5.1
Arrow (3)	5.4
WL 322 HQ (4)	6.2
Magnum IV (4)	6.4
Saranac (4)	6.7
DK 133 (4)	7.4
Archer (5)	7.7
Mean	5.9
LSD (.05)	0.8
CV %	9.1

*Fall dormancy was measured as natural plant height in a space-planted, four-replicate trial with approximately 45 plants/entry/replicate.

Table 5 > Pea Aphid Resistance* - Bakersfield, CA (1996)

Entry	% Resistance	A.S.I.
Kanza (R)	45	2.4
WL 326 GZ (R)	37	2.2
MagnaGraze (LR)	10	3.9
Magnum IV (LR)	9	4.0
Ranger (S)	0	4.6
Mean	20	3.4
LSD (.05)	10	0.3
CV %	9.7	6.3

*Data obtained from a 4-replicate greenhouse flat test with approximately 70 seedlings/entry/replicate.

Table 6 > Blue Alfalfa Aphid Resistance* - Bakersfield, CA (1996)

Entry	% Resistance	A.S.I.
Cuf 101 (HR)	55	2.0
WL 326 GZ (R)	39	2.7
WL 322 HQ (R)	39	2.8
DK 133 (LR)	14	3.8
WL 317 (LR)	9	4.0
Caliverde (S)	0	4.9
Mean	26	3.4
LSD (.05)	8	0.4
CV %	7.2	3.3

*Data obtained from a 4-replicate greenhouse flat test with approximately 70 seedlings/entry/replicate.

Table 7 > Flower Color Designations*

Variety	% Purple	% Variegated	% Cream	% White	% Yellow	Total %
WL 326 GZ	**99**	**1**	**trace**	**trace**	**trace**	**100**
Magnum IV	92	8	trace	trace	trace	100
DK 133	90	10	trace	trace	trace	100
Cut N'Graze	88	12	trace	trace	trace	100
MagnaGraze	88	12	trace	trace	trace	100

*WL 326 GZ flower color data is from WL (see Objective Description C), all other flower color information is from NAVRB variety descriptions.

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Table 1 > Anthracnose (Race 1) Resistance*
Evansville, WI (1999)
Seeded 2/15/99 Scored 3/11/99

Entry	% Resistance
Arc (HR)	65
WL 326 GZ (HR)	**59**
Riley (MR)	22
Hi-Phy (LR)	11
Saranac (S)	0
Mean	31
LSD (.05)	17
CV (%)	36

*Data was obtained from a 4-replicate greenhouse tub test with approximately 50 seedlings/entry/replicate.

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Table 2 > Aphanomyces root rot (Race 1) Resistance*
Evansville, WI (1999)
Seeded 2/15/99 Scored 3/11/99

Entry	% Resistance	A.S.I.
WL 326 GZ (HR)	**58**	**2.2**
WAPH-1 (HR)	50	2.4
Pioneer 5373 (LR)	11	3.8
Hi-Phy (S)	3	4.7
Saranac (S)	1	4.7
Riley (S)	0	4.8
Mean	21	3.8
LSD (.05)	8	0.3
CV (%)	15.2	8.1

*Data was obtained from a 4-replicate greenhouse tub test with approximately 60 seedlings/entry/replicate.

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Table 3 > Phytophthora root rot Resistance*
Evansville, WI (1999)
Seeded 2/15/99 Scored 3/11/99

Entry	% Resistance
WL 326 GZ (HR)	**63**
WAPH-1 (HR)	55
Pioneer 5373 (MR)	26
Hi-Phy (MR)	21
Saranac (S)	2
Mean	33
LSD (.05)	11
CV (%)	17

*Data was obtained from a 4-replicate greenhouse tub test with approximately 65 seedlings/entry/replicate.

FORM APPROVED: OMB NO. 0581-0055

EXHIBIT C
(Alfalfa)

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
LIVESTOCK AND SEED DIVISION
PLANT VARIETY PROTECTION OFFICE
BELTSVILLE, MARYLAND 20705

OBJECTIVE DESCRIPTION OF VARIETY
ALFALFA *(Medicago sativa* sensu Gunn et al.*)*

NAME OF APPLICANT(S)	TEMPORARY DESIGNATION	VARIETY NAME
W-L Research, Inc.	WS206	WL 326 GZ

ADDRESS *(Street and No., or R.F.D. No., City, State, and Zip Code)*
8701 W. US Hwy. 14
Evansville, WI 53536-8752
Phone: (608) 882-4100

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PVPO NUMBER 9600215

PLEASE READ ALL INSTRUCTIONS CAREFULLY: Place numbers in the boxes to designate the expressions which are characteristic of the commerical generations of the application variety. Data for quantitative plant characters should be based on a minimum of 100 plants. Include leading zeros when necessary (e.g., [0][8][9]) for quantitative data. Comparative data should be determined from varieties entered in the same trial. Plant color may be precisely designated by using any recognized color chart, e.g., The Munsell Plant Tissue Color Charts.

1. WINTERHARDINESS:

[7] CLASS:
1 = Very Non-Winterhardy (CUF 101)
2 = Non-Winterhardy (Moapa 69)
3 = Intermediately Non-Winterhardy (Mesilla)
4 = Semi-Winterhardy (Lahontan)
5 = (Du Puits)
6 = Moderately Winterhardy (Saranac)
7 = (Ranger)
8 = Winterhardy (Vernal)
9 = Extremely Winterhardy (Norseman)

TEST LOCATION: Evansville, WI

2. FALL DORMANCY:

FALL DORMANCY (DETERMINED FROM SPACED PLANTINGS)

TESTING INSTITUTION AND LOCATION	DATE OF LAST CUT	DATE REGROWTH SCORED	REGROWTH SCORE OR AVERAGE HEIGHT				LSD .05
			APPLICATION VARIETY	CHECK VARIETIES*			
				Vernal	Pio. 5246	Saranac	
Evansville, WI	9/95	10/95	5.1	3.4	5.0	6.7	0.8

* CUF 101, Moapa 69, Mesilla, Lahontan, Du Puits, Saranac, Ranger, Vernal, or Norseman as appropriate.

Specify scoring system used: Height in inches from a replicated spaced-plant nursery

[6] Fall Growth Habit (Determined from Fall Dormancy Trials)
1 = Erect (CUF 101)
3 = Semierect (Mesilla)
5 = Intermediate (Saranac)
7 = Semidecumbent (Vernal)
9 = Decumbent (Norseman)

3. RECOVERY AFTER FIRST SPRING CUT (In Southwest, first cut after March 21):

[3]
1 = Very Fast (CUF 101)
3 = Fast (Saranac)
5 = Intermediate (Ranger)
7 = Slow (Vernal)
9 = Very Slow (Norseman)

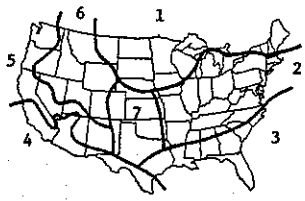
TEST LOCATION: Evansville, WI

4. AREAS OF ADAPTATION IN U.S. (Where tested and proven adapted):

[2] Primary Area of Adaptation

[1][3] Other Areas of Adaptation

1 = North Central
2 = East Central
3 = Southeast
4 = Southwest
5 = Moderately Winterhardy Intermountain
6 = Winterhardy Intermountain
7 = Great Plains
8 = Other *(Specify)* _____



5. FLOWERING DATE (When 10% of plants possess open flowers at time of first spring cut):

[0][4] Days Earlier Than . . . . . [4]
Same As . . . . . [3]
[0][5] Days Later Than . . . . . [2]

1 = CUF 101
2 = Mesilla
3 = Saranac
4 = Vernal
5 = Norseman

TEST LOCATION: Warden, WA

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6. PLANT COLOR (Determined from healthy regrowth 3 weeks after first spring cut, controlling leafhoppers if necessary):

[2] 1 = Very Dark Green (524) 2 = Dark Green (Vernal) 3 = Light Green (Ranger)

COLOR CHART VALUE *(Specify chart used;* Munsell Color Charts, 1st Edition, 1952. Munsell Co., Baltimore,MI

APPLICATION VARIETY: 5/6

VERNAL: 5/6 (WL 322 HQ = 4/6, WL 252 HQ = 5/6)

TEST LOCATION: Evansville, WI; Measurements taken July 11, 1995; leafhopper controlled with insecticide.

7. CROWN TYPE (Determined from spaced plantings):

[1] Noncreeping Types: 1 = Broad (Vernal) 2 = Intermediate (Saranac) 3 = Narrow (CUF 101)

Creeping Types: 4 = Creeping Rooted (Rangelander) 5 = Rhizomatous (Rhizoma)

8. FLOWER COLOR (Determine frequency of plants for each color class as defined by USDA Agricultural Handbook No. 424 (Barnes 1972), allowing all plants in plot to flower):

[0][9][9] % Purple and Violet (Subclasses 1.1 to 1.4)

[0][0][1] % Variegated Other Than Blue (Subclasses 2.1, 2.2, 2.5 to 2.9)

[ ][ ][0] % Cream (Class 3)

[ ][ ][0] % Blue (Subclasses 2.3 and 2.4)

[ ][ ][0] % Yellow (Subclasses 4.1 to 4.4)

[ ][ ][0] % White (Class 5)

TEST LOCATION: Warden, Washington

9. POD SHAPE (Determine frequency of plants with the following pod shapes produced on well cross-pollinated racemes):

[1][0][0] % Tightly Coiled (One or more coils, center more or less closed)

[ ][ ][0] % Loosely Coiled (One or more coils, center conspicuously open)

[ ][ ][0] % Sickle (Less than 1 coil)

TEST LOCATION: Warden, Washington

10. PEST RESISTANCE: Provide in the appropriate column, trial data for application variety, and resistant (R) and susceptible (S) check varieties, synthetic generation tested, average severity index scores (ASI), least significant difference statistics (LSD .05), the institution in charge of test, year, and location of test, and whether test is a field or laboratory evaluation. Describe scoring system, and any test procedure which differs from standard methods proposed by Elgin (1982). Trial data from other test years or locations should be presented whenever available on a separate document as Exhibit D.
Seeds of the check varieties and germplasm lines listed below can be obtained from the USDA Field Crops Laboratory, Bldg. 001, Rm. 335, BARC-West, Beltsville, MD 20705. Although comparisons with check varieties listed below are preferred, comparisons with any appropriate check variety recommended by Elgin (1982) may be presented.

A. DISEASE RESISTANCE: DISEASE	VARIETY	SYN. GEN. TESTED	PERCENT RESISTANT PLANTS	NUMBER OF PLANTS TESTED	ASI	ASI LSD .05	INSTITUTION, YEAR, LOCATION, FIELD OR LABORATORY
Anthracnose, Race 1 *(Colletotrichum trifolii)* (HR)	Application	1	62	194	---	% Resis. LSD (.05) 10	W-L Research, Inc. Evansville, WI (1995
	Arc (R)		65	190	---		
	Saranac (S)		0	187	---		
	SCORING SYSTEM: Percent resistance based on seedling survival						
Anthracnose, Race 2 *(Collectotrichum trifolii)*	Application						
	Saranac AR (R)						
	Arc (S)						
	SCORING SYSTEM:						
Bacterial Wilt *(Corynebacterium insidiosum)* (HR)	Application	1	67	174	1.27	0.36	W-L Research, Inc. Evansville, WI (1995
	Vernal (R)		42	175	2.14		
	~~Narragansett (G)~~ – Sonora (S)		0	166	4.37		
	SCORING SYSTEM: Plants scored 0-5; 0 and 1 resistant and 5 = dead plant						
Common Leafspot *(Pseudopeziza medicaginis)*	Application						
	MSA-CW3AN3 (R)						
	Ranger (S)						
	SCORING SYSTEM:						

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10. A. PEST RESISTANCE (Continued):

DISEASE	VARIETY	SYN. GEN. TESTED	PERCENT RESISTANT PLANTS	NUMBER OF PLANTS TESTED	ASI	ASI LSD .05	INSTITUTION, YEAR, LOCATION, FIELD OR LABORATORY
Downy Mildew *(Peronospora trifoliorum)*	Application						
Isolate, if known:	Saranac (R)						
	Kanza (S)						
	SCORING SYSTEM:						
Fusarium Wilt *(Fusarium oxysporum f. medicaginis)*	Application	1	66	173	1.36		W-L Research, Inc. Evansville, WI (1995
(HR)	~~Moapa 69 (R)~~ Agate (R)		54	186	2.11	0.38	
	~~Narragansett (R)~~ MnGN-1 (S)		4	181	4.14		
	SCORING SYSTEM: Plants scored 0-5; 0 and 1 resistant and 5 = dead plant						
Phytophthora Root Rot *(Phytophthora megasperma f. medicaginis)*	Application	1	62	220	---	% Resis. LSD (.05) 11	W-L Research, Inc. Evansville, WI (1995
(HR)	Agate (R)		33	206	---		
	Saranac (S)		0	213	---		
	SCORING SYSTEM: Percent resistance based on seedling survival						
Verticillium Wilt *(Verticillium alboatrum)*	Application	1	57	217	2.4	0.3	W-L Research, Inc. Evansville, WI (1996
(HR)	~~Vertus (R)~~ Oneida VR (HR)		60	209	2.5		
	Saranac (S)		1	222	4.3		
	SCORING SYSTEM: Plants scored 1-5; 1 and 2 resistant and 5 = dead plant						
Other *(Specify)* Lepto Leaf Spot	Application	1	23	136	3.48		W-L Research, Inc. Evansville, WI (1995
(MR)	(R) MSA-PL-L		25	140	3.34	0.27	
	(S) Ranger		4	142	4.06		
	SCORING SYSTEM: Plants scored 1-5; 1 and 2 resistant and 3-5 susceptible						
Other *(Specify)* Aphanomyces Root Rot (Race 1)	Application	1	59	212	2.48		W-L Research, Inc. Evansville, WI (1996
(HR)	(R) WAPH-1		50	212	2.74	0.46	
	(S) Agate		0	210	4.85		
	SCORING SYSTEM: Plants scored 1-5; 1 and 2 resistant and 5 = dead plant						

B. INSECT RESISTANCE:

INSECT	VARIETY	SYN. GEN. TESTED	PERCENT DEFOLIATION	DEFOLIATION IN PERCENT OF RESISTANT CHECK	ASI	ASI LSD .05	INSTITUTION, YEAR, LOCATION, FIELD OR LABORATORY
Alfalfa Weevil *(Hypera postica)*	Application						
	Arc (R)			100			
	Saranac (S)						
	SCORING SYSTEM:						

10. B. INSECT RESISTANCE (Continued):

INSECT	VARIETY	SYN. GEN. TESTED	PERCENT SEEDLING SURVIVAL	NUMBER OF SEEDLINGS TESTED	ASI	ASI LSD .05	INSTITUTION, YEAR, LOCATION, FIELD OR LABORATORY
Blue Alfalfa Aphid *(Acyrthosiphon kondoi)* (R)	Application	1	38	280	2.8	0.5	W-L Research, Inc. Bakersfield, CA (1995
	CUF 101 (R)		55	285	2.2		
	~~PA-1 (S)~~ Caliverde (S)		0	281	4.9		
	SCORING SYSTEM: Plants scored 1-5; 1 and 2 resistant and 5 = dead plant						
Pea Aphid *(Acyrthosiphon pisum)* (R)	Application	1	35	277	3.1	0.3	W-L Research, Inc. Bakersfield, CA (1995
	Kanza (R)		45	275	2.7		
	Ranger (S)		2	277	4.5		
	SCORING SYSTEM: Plants scored 1-5; 1 and 2 resistant and 5 = dead plant						
Spotted Alfalfa Aphid *(Therioaphis maculata)* *Biotype, if known:* (H) (R)	Application	1	41	296	2.6	0.4	W-L Research, Inc. Bakersfield, CA (1995
	Kanza (R)		35	284	2.9		
	Ranger (S)		1	289	4.8		
	SCORING SYSTEM: Plants scored 1-5; 1 and 2 resistant and 5 = dead plant						

INSECT	VARIETY	SYN. GEN. TESTED	PERCENT RESISTANT PLANTS	NUMBER OF PLANTS TESTED	ASI	ASI LSD .05	INSTITUTION, YEAR, LOCATION, FIELD OR LABORATORY
Potato Leafhopper Yellowing *(Empoasca fabae)*	Application						
	MSA-CW3An3 (R)						
	Ranger (S)						
	SCORING SYSTEM:						
Other *(Specify)*	Application						
	(R)						
	(S)						
	SCORING SYSTEM:						

C. NEMATODE RESISTANCE: NEMATODE	VARIETY	SYN. GEN. TESTED	PERCENT RESISTANT PLANTS	NUMBER OF PLANTS TESTED	ASI	ASI LSD .05	INSTITUTION, YEAR, LOCATION, FIELD OR LABORATORY
Northern Root Knot *(Meloidogyne hapla)*	Application						
	Nev. Syn. XX (R)						
	Lahontan (S)						
	SCORING SYSTEM:						

10. C. NEMATODE RESISTANCE (Continued):

NEMATODE	VARIETY	SYN. GEN. TESTED	PERCENT RESISTANT PLANTS	NUMBER OF PLANTS TESTED	ASI	ASI LSD .05	INSTITUTION, YEAR, LOCATION, FIELD OR LABORATORY
Southern Root Knot *(Meloidogyne incognita)*	Application						
	Moapa 69 (R)						
	Lahontan (S)						
	SCORING SYSTEM:						
Stem Nematode *(Ditylenchus dipsaci)* (R)	Application	1	38	194	3.4	0.3	W-L Research, Inc. Warden, WA (1996)
	Lahontan (R)		40	192	3.5		
	Ranger (S)		6	189	4.4		
	SCORING SYSTEM: Plants scored 1-5; 1 and 2 resistant and 5 = dead plant						
Other *(Specify)*	Application						
	(R)						
	(S)						
	SCORING SYSTEM:						

11. INDICATE THE VARIETY THAT MOST CLOSELY RESEMBLES THE APPLICATION VARIETY FOR EACH OF THE FOLLOWING CHARACTERS:

CHARACTER	VARIETY	CHARACTER	VARIETY
Winterhardiness	Pioneer 5246	Plant Color	WL 252 HQ
Recovery After 1st Cut	Saranac	Crown Type	Alfagraze
Area of Adaptation	Cut N'Graze	Combined Disease Resistance	DK 133
Flowering Date	Arrow	Combined Insect Resistance	GH755

REFERENCES

Barnes, D.K. 1972. A System for Visually Classifying Alfalfa Flower Color. U.S. Dep. Agric. Handb. 424. 18 pp. (Note: Greenish cast of plate 6, A and B is an artifact of printing, actual colors a blend of yellow and white.)

Elgin, J.H., Jr., (ed.). 1982. Standard Tests to Characterize Pest Resistance in Alfalfa Cultivars. U.S. Dep. Agric. Tech. Bull. (In Press).

Gunn, C.R., W.H. Skrdla, and H.C. Spencer. 1978. Classification of Medicago sativa L. using legume characters and flower colors. U.S. Dep. Agric. Tech. Bull. 1574. 84 pp.

Munsell Color Co. 1977. Munsell Plant Tissue Color Charts. Munsell Color Co., Inc. Baltimore.

NOTE: Any additional descriptive information and supporting documentation may be provided as Exhibit D.

Exhibit D

Additional Description of Variety

WL 326 GZ is a fall-dormant alfalfa variety adapted for dual purpose use (both haying and grazing) in the northeastern, southeastern, midwestern, and northwestern United States. Mid-summer growth is erect and fall growth is semi-erect. WL 326 GZ demonstrates a level of grazing tolerance (persistence) similar to other grazing types and superior to varieties not selected for tolerance to grazing (see table below).

Grazing Tolerance (Persistence) - Mt. Joy, PA

Planted April 1995 Scored November 1995

Entry	% Stand*
Alfagraze	87
WL 326 GZ	81
Cut N'Graze	74
WL 317	58
WL 322 HQ	57
LSD (.05)	11
CV %	17

*Percent stand calculated on the average of four visual estimates of % stand density per variety (4 replicates).

Exhibit E

Statement of Applicant's Ownership

WL 326 GZ is a proprietary alfalfa variety developed by the plant breeding staff of W-L Research, Inc., 8701 W. US Hwy. 14, Evansville, WI 53536-8752. W-L Research, Inc. is the sole owner of the WL 326 GZ variety of alfalfa.

Applications for plant variety protection on WL 326 GZ have not been filed in any other country.

REPRODUCE LOCALLY. *Include form number and date on all reproductions.* FORM APPROVED - OMB NO. 0581-0055 EXPIRES: 12-31-9

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
SCIENCE AND TECHNOLOGY DIVISION - PLANT VARIETY PROTECTION OFFICE

EXHIBIT E
STATEMENT OF THE BASIS OF OWNERSHIP

The following statements are made in accordance with the Privacy Act of 1974 (5 U.S.C. 552a) and the Paperwork Reduction Act (PRA) of 1995.

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). Information is held confidential until certificate is issued (7 U.S.C. 2426).

1. NAME OF APPLICANT(S)

W-L Research, Inc.

2. TEMPORARY DESIGNATION OR EXPERIMENTAL NUMBER

WS 206

3. VARIETY NAME

WL 326 GZ

4. ADDRESS *(Street and No., or R.F.D. No., City, State, and ZIP Code, and Country)*

8701 W. US Hwy. 14
Evansville, WI 53536-8752
USA

5. TELEPHONE *(include area code)*

(608) 882-4100

6. FAX *(include area code)*

(608) 882-5800

7. PVPO NUMBER

96000215

8. Does the applicant own all rights to the variety? *Mark an "X" in appropriate block.* If no, please explain. [X] YES [ ] NO

9. Is the applicant (individual or company) a U.S. national or U.S. based company? If no, give name of country _____ [X] YES [ ] NO

10. Is the applicant the original breeder? If no, please answer the following: [X] YES [ ] NO

a. If original rights to variety were owned by individual(s):
Is (are) the original breeder(s) a U.S. national(s)? If no, give name of country _____

b. If original rights to variety were owned by a company:
Is the original breeder(s) U.S. based company? If no, give name of country _____ [ ] YES [ ] NO

11. Additional explantion on ownership *(If needed, use reverse for extra space):*

The original breeder of WL 326 GZ, Dr. Michael Peterson, has given up all rights of ownership of WL 326 GZ to his employer, W-L Research, Inc.

PLEASE NOTE:

Plant variety protection can be afforded only to owners (not licensees) who meet one of the following criteria:

1. If the rights to the variety are owned by the original breeder, that person must be a U.S. national, national of a UPOV member country, or national of a country which affords similar protection to nationals of the U.S. for the same genus and species.

2. If the rights to the variety are owned by the company which employed the original breeder(s), the company must be U.S. based, owned by nationals of a UPOV member country, or owned by nationals of a country which affords similar protection to nationals of the U.S. for the same genus and species.

3. If the applicant is an owner who is not the original breeder, both the original breeder and the applicant must meet one of the above criteria.

The original breeder may be the individual or company who directed final breeding. See Section 41(a)(2) of the Plant Variety Protection Act for definition.